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California
Forum
on
Information
Technology

Data Processing Management Development

***A Report of the CFIT
Subcommittee on Personnel***

December 13, 1989



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To State Executives

As chairman of the CPIT Management Development Subcommittee, I wish to address this brief preface to the directors of State agencies and to other senior executives in California State Government.

As you read this report, I urge you to consider its recommendations in light of your personal goals for information management within your agency. Large or small, every state agency employs information technology to some extent in its operations. In fact, the majority of agencies have a very substantial dependence on automation and telecommunications. The dynamic, growing State that we serve has benefitted greatly from the willingness of executives such as yourselves to take advantage of the opportunities provided by continuing developments in information technology.

As we grow more and more sophisticated in our use of technology, we must never lose sight of the basic fact that technology alone cannot provide opportunities or answers to the problems our agencies face. The real equation is, "Technology plus **people** equals solutions!" The critical factor in converting information technology into workable solutions continues to be the skill and leadership of managers — particularly the data processing managers who are responsible for implementing the systems that will support accomplishment of agency program goals.

Your thoughtful investment in the people side of this equation is essential if the State is to realize the full benefits of information technology. In the past, we have tended to use our limited training funds to develop staff technical skills. We have too often ignored the need to develop data processing managers who are both technically competent and capable of planning strategies to support the long range goals of our agencies.

The members of CFIT have focused on creating the mechanisms necessary to develop a new generation of leaders in data processing. Each component of the management development program in the following pages addresses an area of critical need. Together, the components provide a coordinated program to identify, evaluate, and develop future data processing leaders.

I urge each of you, as key State executives, to consider carefully these recommendations and provide the financial and managerial support necessary to make this essential program a success.

Ralph Shoemaker, Chairman
CFIT Subcommittee on Personnel



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Special thanks are due to the many data processing managers and State executives who participated in surveys and interviews and whose input was invaluable in the preparation of this report.

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- State Governments

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- Local Governments

Los Angeles
San Diego
Santa Clara

Sacramento
San Francisco

- Private Sector

Bank of America
Pacific Bell
Wells Fargo Bank

Hewlett Packard
Pacific Gas and Electric

- Colleges and Universities

CSU, Chico
UC, Berkeley
UC, Los Angeles

CSU, Sacramento
UC, Davis



The Need for Qualified Managers

The State of California is a recognized leader in the use of information technology. By aggressively adopting automation, the State has been able to control costs while providing increasingly higher levels of quality public services. Computer-based information systems are indispensable to the effective operation of virtually all State programs. The efficiencies realized through automation are necessary to maintaining required levels of operations within a balanced budget.

Agency data processing organizations will face a crisis of management in the coming decade. The explosion in the number of technical alternatives, coupled with the increasing complexity of information technology, is challenging the knowledge and skills of the managers who are responsible for planning and implementing automated systems.

Successful data processing management requires strong administrative and political skills, as well as working knowledge of information technology. Agency executive management is increasingly aware of the need for systems managers to participate fully in developing strategic plans for employing information technology in support of the accomplishment of agency goals. Successful management of the data processing function requires managers who are capable of functioning as full members of the agency's senior management team. These managers must be able to view emerging developments in information technology in relation to their agency's mission and program goals.

As a major consumer of information technology products and services, the State requires data processing managers with strong negotiating skills and the highest ethical values in order to exploit opportunities to reduce costs and develop advanced applications.

Development of the complex skills necessary to manage technology effectively during the 1990s requires focused training. No training structure presently exists for improving the State's ability to manage information technology in this rapidly evolving environment. This lack of specific management training forces the new data processing manager to attempt to cope with an increasingly complex environment using only skills previously developed as a technical specialist.



The CFIT Response

The CFIT Executive Committee recognized the need to address the issue of data processing management development and established a subcommittee of senior managers in October, 1988. The subcommittee held a one-day work session to define the scope of the project and identify goals and issues.

The following senior State executives participated as members of the Management Development Subcommittee:

PK Agarwal, Department of General Services
Russ Bohart, Health and Welfare Agency Data Center
Steve Kolodney, Office of Information Technology
David Lema, Stephen P. Teale Data Center
James Magers, Law Enforcement Data Center
Pat McDonald, Statewide Training Center
Ralph Shoemaker, Franchise Tax Board
Tom Speer, Department of Water Resources
Frank Tanaka, Department of Personnel Administration
Elaine Vann, State Personnel Board

The subcommittee established the following goal:

Put in place the mechanisms necessary to ensure continuous availability of highly qualified data processing managers to meet the growing needs of State agencies.

The subcommittee identified a number of key issues that would have to be addressed in order to accomplish this goal:

- Ethics are important in the practice of information management. Values and moral principles associated with standards of professional behavior should be documented and shared with data processing managers throughout State government.

- A profile of the critical skills and attributes for success as a data processing manager in California State Government has not been established. As yet, there is no accepted model for assessing management candidates or evaluating the performance of current data processing managers.
- No standardized method has been established for assessing the critical skills of data processing managers in order to provide them with feedback about their strengths and weaknesses.
- No State-sponsored development program meets the specific needs of data processing managers. The management skills of these individuals will be an increasingly critical factor in the State's successful implementation of applications of information technology.
- Specific on-the-job training needs of future data processing managers have received little attention. There is no program to identify and cultivate development of those individuals who are most qualified to assume the responsibility for management of agency data processing in the 1990s.
- Decentralized testing may not provide agencies with the best qualified candidates from which to select their senior data processing managers.

The subcommittee recognized that a successful, self-sustaining management development program would require a coordinated course of action, with each of the areas listed above representing a single critical component. Separate working teams were formed to explore each issue in detail. Each team was headed by a member of the subcommittee and augmented by members of the information technology community. Issue papers were developed in each area. Information was gathered and interviews were conducted. The subcommittee reviewed work team activities to ensure that a coordinated approach was maintained. Finally, specific recommendations were developed.

The subcommittee recommendations provide a course of action that, when implemented, will provide for the continuing

growth and availability of the qualified data processing managers necessary to guide and support the State's commitment to information technology. The recommendations address:

- a data processing manager profile;
- a clearly-defined process for skills assessment;
- a training resource guide;
- a data processing managers' training academy;
- a management development program (on-the-job training);
- a code of ethics for data processing management; and,
- a servicewide testing program the Data Processing Managers III and IV classifications.

Together, these recommendations are intended to accomplish the subcommittee's goal of putting in place "the mechanisms necessary to ensure continuous availability of highly qualified data processing managers to meet the growing needs of State agencies."

The subcommittee presented its report and recommendations to the CFIT Executive Committee on June 29, 1989. After discussion, the Executive Committee voted to adopt the recommendations and begin work on their implementation. Ralph Shoemaker was appointed to chair a new CFIT Subcommittee on Personnel.

The following pages discuss individual issues, list the recommendations of the CFIT Management Development Subcommittee, and provide a status report on implementation of the individual components of the management development program.



The CFIT Subcommittee on Personnel

The Management Development Subcommittee recognized the need to maintain active involvement by CFIT in the personnel area. In order to accomplish a number of the recommendations made by the subcommittee, a source of informed advice should continue to be available to the CFIT Executive Committee.

Subcommittee Recommendation

CFIT should establish a Subcommittee on Personnel to provide continuing advice and recommendations to the CFIT Executive Committee on information technology personnel issues.

Status

A CFIT Subcommittee on Personnel has been established, with Ralph Shoemaker appointed as chair. Appointments to the subcommittee are representative of the balanced membership of the CFIT Executive Committee. The subcommittee has adopted a formal charter (Exhibit 1) and continues to carry forward with the momentum created by the Management Development Subcommittee.

Exhibit 1

CFIT Subcommittee on Personnel Charter



CFIT Subcommittee on Personnel Charter

Recruitment, development, and retention of qualified personnel constitute the most critical continuing issues facing the State data processing community. The CFIT Subcommittee on Personnel provides advice and recommendations to the CFIT Executive Committee and to the Office of Information Technology with respect to servicewide data processing personnel issues.

The subcommittee provides advice in establishing and maintaining *training and development programs* for data processing classifications and on the development of the Accelerated Management Training program, including the selection process for program candidates.

The subcommittee reviews and makes recommendations with respect to *specifications and minimum qualifications* of data processing classifications, assessing whether the testing mechanisms are focused to ensure that agency needs are being met.

The subcommittee advises on *servicewide testing* for the classifications of Data Processing Managers III and IV. It provides input on examination plans and schedules and assists in obtaining the participation of departmental consultants.

Appointments to the subcommittee by the Chair will be representative of the balanced membership of the CFIT Executive Committee consisting of at least the following:

- three members of the CFIT Executive Committee representing each of the categories of departments;
- one member representing either Teale or HWDC;
- one member representing DPA;
- one member representing SPB;
- one ex-officio member representing OIT; and
- one at large member from the State's data processing community.



The Management Development Program

The subcommittee members recognized that a coordinated approach to management development was required. Accordingly, they provided a structured set of recommendations that addressed (1) defining the critical skills and attributes necessary for success as a data processing manager, (2) assessing the strengths and weaknesses of individual managers with respect to such skills and attributes, (3) providing a standard training program for data processing managers, and (4) establishing a mechanism for on-the-job management development assignments. Each of these four program components is discussed below.

Skills Profile

Issue

A profile of the critical skills and attributes for success as a data processing manager in California State Government has not been established. As yet, there is no accepted model for assessing management candidates or evaluating the performance of current data processing managers.

Discussion

A shortage exists in State service — as well as in other public and private organizations — of individuals who are qualified to lead data processing organizations. This situation is aggravated by the explosive growth in the use of information technology by State agencies.

To remedy this situation, specific attention should be focused on creating opportunities for individuals to hone their skills and broaden their perspectives. By first identify-

ing the attributes and skills necessary for a successful State data processing manager, effective programs can be designed to meet this need.

The subcommittee developed an initial set of attributes to be used in developing program recommendations. In the process of establishing management development proposals, the attributes were again reviewed and refined. (Exhibit 2)

Subcommittee Recommendation

Adopt the Data Processing Manager Profile and distribute the Profile to the data processing community for use as a guide in developing agency examinations and training programs.

Status

DPA and SEEP are including the Data Processing Manager Profile in the course material for the Data Processing Managers' Training Academy, and this report serves as a vehicle to distribute the profile to the State's data processing community.

Exhibit 2

Data Processing Manager Profile



Data Processing Manager Profile

Personal Characteristics

- Strives for excellence
- Demonstrates integrity and ethical behavior
- Demonstrates exemplary work habits
- Demonstrates energy and enthusiasm
- Demonstrates self confidence
- Demonstrates perseverance
- Maintains a broad perspective
- Maintains good health habits

Creativity, Initiative and Risk Taking

- Demonstrates logical and creative thinking
- Fosters innovation, solicits, and accepts new ideas
- Recognizes opportunities to achieve goals and objectives
- Articulates a vision for the organization
- Takes risks and accepts responsibility for their outcome

Communication, Persuasion and Negotiation

- Demonstrates precision, accuracy and clarity in written and oral communications
- Communicates technical issues in non-technical terms
- Actively listens and understands verbal and nonverbal messages
- Informs superiors of significant issues or problems
- Informs staff about significant issues, changes in management focus, or policies
- Presents issues, policies, and decisions positively
- Presents ideas to obtain commitment to a course of action
- Encourages others to express themselves and their ideas
- Mediates differences between individuals and groups
- Represents data processing to other work groups within the organization
- Negotiates with others on behalf of the organization

Data Processing Manager Profile (continued)

Analysis, Problem Solving and Decision Making

Determines causes of problems and develops alternative solutions
Obtains input from those who have information or vested interests
Interprets and uses varied and complex information
Ensures that decisions are timely and at the appropriate level
Anticipates crises and acts to avoid them
Strives for win-win solutions
Follows-up on implementation of decisions to ensure closure

Effective Team Building

Promotes cooperation and teamwork throughout the organization
Encourages openness, including confrontation and honest disagreement
Balances innovation and participation with productivity
Forms task forces to blend and utilize specific talents
Functions as a team member with peers, superiors, and staff

Coordination of Work Groups and Organizations

Ensures needed information flows freely among work groups
Develops and supports multi-unit objectives
Promotes positive and productive relationships with other units
Maintains a customer relations orientation with clients
Understands the goals and objectives of clients and user groups
Seeks feedback from related organizations and client groups
Balances multiple and conflicting priorities
Understands and uses the "informal" organization
Develops relationships with professional and community resources
Maintains positive and professional relationships with vendors

Data Processing Manager Profile (continued)

Technological Knowledge and Expertise

Maintains knowledge of current system functionality
Pursues knowledge of technological advances in the industry
Seeks advice and assistance on technical issues
Maintains knowledge of related developments in client programs
Commits to an ongoing plan of professional development
Promotes the concept of "life-long learning" among staff

Planning, Organizing, Monitoring and Evaluating Operations

Develops goals consistent with departmental mission
Develops action plans to implement objectives
Defines organizational roles and responsibilities
Determines the resources required for organizational operations
Establishes policies, systems, and procedures
Initiates changes to improve policies, systems, and procedures
Assures compliance with administrative and legal requirements
Monitors and compares program activities to established plan
Monitors and adjusts existing policies, procedures and systems
Evaluates and compares results to objectives
Provides feedback and reports results to superiors and staff

Data Processing Manager Profile (continued)

Selecting, Developing and Supervising Staff

Recruits and assigns staff to meet organizational needs
Selects staff consistent with affirmative action goals
Develops staff through assignments, training, and coaching
Identifies staff strengths and weaknesses
Motivates staff to perform well, giving praise and recognition
Establishes performance standards with staff
Assigns and adjusts staff workloads
Delegates authority and responsibility appropriately
Monitors and records critical work behaviors
Appraises and discusses individual performance
Adjusts approach to fit the individual or group's situation
Responds to staff grievances promptly and fairly
Interprets and administers labor contracts
Uses preventive, corrective, and adverse actions as necessary

Managing Fiscal and Material Resources

Understands state administrative procedures
Proposes a well-documented organizational budget
Develops realistic and efficient project budgets
Utilizes resources for effective and efficient operations
Operates within allocated resources
Monitors and adjusts the use of resources
Knows and uses outside resources when appropriate
Promotes an entrepreneurial approach to resource management
Considers expenditures as venture capital, not cost of business

Skills Assessment

Issue

No standardized method is currently being used for assessing the critical skills of State data processing managers in order to provide them with feedback about their strengths and weaknesses.

Discussion

Numerous government agencies and private sector organizations were contacted to determine what skills they felt were necessary for successful data processing managers and which of those skills were most commonly lacking. The skills identified by the substantial majority of organizations focused on the need for standard management skills in addition to specifically technical skills.

Two types of management assessment methods were considered: an assessment center and an assessment questionnaire. The subcommittee decided that an assessment center was too formal and costly in terms of both money and time, and would also be difficult to implement. An assessment questionnaire was determined to be less expensive and more easily implemented.

The subcommittee developed a prototype Data Processing Manager Self Assessment based on the skills identified through the interviews and the attributes included in the Data Processing Manager Profile. (Exhibit 3)

As envisioned by the subcommittee, the assessment program would:

- Either be administered entirely by a State organization or contracted out to an organization that specializes in such programs. An outside organization might be less threatening to participants.
- If administered by a State organization, the Department of Personnel Administration (DPA) and the State EDP Education Program (SEEP) in the Department of General Services are logical alternatives, in that the assessment program should be administered like any other training program.

- Be based on voluntary participation. The program will benefit the participating employee, his or her supervisor, and their agency, but people must want to participate for it to work.
- Provide confidentiality with respect to individual assessments. A copy of the resultant training plan should be provided to the supervisor, so it can be incorporated into the employee's overall training program and progress be monitored. It is not critical that the supervisor know the nature of the employee's deficiencies, only that the specific training plan address any identified deficiencies.
- Be available to all data processing management levels. It would be especially beneficial if the Data Processing Manager IIIs and IVs were initial participants in the program to show their commitment, as well as to establish plans for their own development.
- Provide for creation and maintenance of a composite skills profile in a statewide data base. Such a data base would allow agencies to measure themselves against the statewide experience and work together to address common deficiencies.

Subcommittee Recommendation

Request that DPA design and administer an assessment questionnaire to identify areas where participants may need additional development to perform the data processing management function.

- *The process should not be used in the selection or promotion process and participation should be voluntary.*
- *The assessment process should involve not only the employee but also his or her supervisor and peers to provide a broad view of the participants' capabilities.*
- *DPA should contract with an organization specializing in assessment techniques to work with DPA and CFIT in the development of the assessment questionnaire and process.*

- *The costs of developing the assessment questionnaire should be shared on an equitable basis by those agencies that are significant users of information technology, with ongoing costs prorated to participants in a manner similar to regular training classes.*

Status

The Subcommittee on Personnel has appointed a working group to define and assist in the establishment of an assessment process. They are working closely with DPA and SEEP to develop a two-day workshop whose core will be the self-assessment process.

Exhibit 3

Data Processing Manager Self Assessment



Data Processing Manager Self Assessment

How clear are you concerning your organization and manager's expectations of you in each of the following areas:

Personal work habits	Clear	Some questions	Unsure
Integrity and ethical behavior	Clear	Some questions	Unsure
Personal health habits	Clear	Some questions	Unsure

In comparison to your peers, how would you rate your level of:

Perseverance	High	Medium	Low
Energy and enthusiasm	High	Medium	Low
Self confidence	High	Medium	Low

Please rank order the following in terms of how descriptive they are of your current strengths — **1 being most like you and 5 least**:

- Ranking ___ Shows broad perspective by addressing all aspects of a problem over and above his or her particular area of expertise
- Ranking ___ Strives for excellence by setting and achieving high standards of quality and service
- Ranking ___ Demonstrates customer service orientation by placing customer needs above personal conveniences
- Ranking ___ Demonstrates logical thinking by analyzing problems and developing plans to address them
- Ranking ___ Demonstrates creative thinking by generating innovative ideas and new approaches

Data Processing Manager Self Assessment (continued)

For each question below, enter one of the following numbers in the space to the left of the question.

- 1 — if you **rarely** do what is described in the statement
- 2 — if you do what is described **occasionally but infrequently**: that is, less often than most other people you observe in similar situations
- 3 — if you do what is described **an average amount**: that is, about as often as most other people you observe in similar situations
- 4 — if you do what is described **fairly often**: that is, somewhat more than other people you observe in similar situations
- 5 — if you do what is described **frequently**: that is, considerably more than other people you observe in similar situations

How often do you:

- ___ Foster innovation by soliciting and accepting new ideas?
- ___ Anticipate crises and act to avoid them?
- ___ Articulate a vision for the organization to strive towards?
- ___ Take risks and accept responsibility for their outcome?
- ___ Actively listen to understand verbal and nonverbal messages?
- ___ Keep top management informed of significant issues and problems?
- ___ Keep staff informed about issues, changes and policies?
- ___ Represent your program to other work groups within the organization?
- ___ Encourage others to express themselves and their ideas?
- ___ Present policies and decisions positively to staff?
- ___ Present ideas persuasively to increase other's commitment to a course of action?
- ___ Obtain input from those who have information or vested interest?
- ___ Ensure that decisions are timely and at the appropriate level?
- ___ Follow-up on implementation of decisions to ensure closure?
- ___ Promote cooperation and teamwork within and among work units?
- ___ Encourage openness including confrontation and disagreement?
- ___ Form task forces to blend and utilize specific talents?
- ___ Function as a team member with peers, superiors and staff?

Data Processing Manager Self Assessment (continued)

- _____ Ensure needed information flows freely among work groups?
- _____ Develop and support multi-unit objectives?
- _____ Promote positive and productive relationships with other units?
- _____ Seek feedback from related organizations and client groups?
- _____ Develop relationships with professional and community resources?
- _____ Seek expert advice and assistance on technical issues?
- _____ Update your knowledge of technical changes in current operating systems?
- _____ Update your knowledge of technological advances in the industry?
- _____ Update your knowledge of related developments in client programs?
- _____ Develop goals and objectives consistent with department mission?
- _____ Develop action plans to implement objectives?
- _____ Initiate changes to improve policies, systems and procedures?
- _____ Assure compliance with administrative and legal requirements?
- _____ Monitor and compare program activities to established plans?
- _____ Monitor and adjust existing policies, procedures and systems?
- _____ Evaluate and compare results to objectives?
- _____ Provide feedback and report results to staff?
- _____ Select staff consistent with affirmative action goals?
- _____ Develop staff through assignments, training and coaching?
- _____ Motivate staff to perform at their highest level?
- _____ Give praise and recognition?
- _____ Establish performance standards with staff?
- _____ Monitor and records critical work behaviors?
- _____ Appraise and discuss individual performances?
- _____ Adjust approach to fit the individual or group's situation?
- _____ Operate within allocated resources?
- _____ Monitor and adjust the use of resources?
- _____ Promote an entrepreneurial approach to resource management?
- _____ Consider expenditures as venture capital, not cost of business?

Data Processing Manager Self Assessment (continued)

Please indicate the extent to which you agree or disagree with the following statements:

	YES	yes	not sure	no	NO
I quickly recognize opportunities to achieve goals and objectives	Y	y	?	n	N
I prepare adequate long-range plans for my unit	Y	y	?	n	N
I express my thoughts clearly and concisely when speaking	Y	y	?	n	N
I express my thoughts clearly and concisely in writing	Y	y	?	n	N
I ensure that all written work is clear, concise, and accurate	Y	y	?	n	N
I effectively mediate differences between individuals and groups	Y	y	?	n	N
I effectively negotiate with others on behalf of the organization	Y	y	?	n	N
I accurately determine the cause of problems and develop alternate solutions	Y	y	?	n	N
I accurately interpret and use varied and complex information	Y	y	?	n	N
I balance innovation and participation with productivity	Y	y	?	n	N
I clearly understand the goals and objectives of our clients and user groups	Y	y	?	n	N
I clearly understand and effectively use the "informal" organization	Y	y	?	n	N
I maintain positive and professional relationships with vendors	Y	y	?	n	N
I am committed to an ongoing plan of professional development	Y	y	?	n	N
I promote life-long learning and accurate self-assessment	Y	y	?	n	N
I develop accurate and complete project plans and schedules	Y	y	?	n	N

Data Processing Manager Self Assessment (continued)

I clearly define my unit's organizational roles and responsibilities	Y	y	?	n	N
I accurately determine in advance the resources required for organizational operations	Y	y	?	n	N
I establish effective policies, systems and procedures for my unit	Y	y	?	n	N
I prepare accurate and complete project budgets	Y	y	?	n	N
I effectively recruit and assign staff to meet organizational needs	Y	y	?	n	N
I effectively delegate assignments to subordinate managers	Y	y	?	n	N
I accurately identify staff strengths and weaknesses	Y	y	?	n	N
I effectively assign and adjust staff workloads to meet changing priorities	Y	y	?	n	N
I delegate authority appropriately	Y	y	?	n	N
I respond to staff grievances promptly and fairly	Y	y	?	n	N
I accurately interpret and administer labor contracts	Y	y	?	n	N
I use preventive, corrective and adverse actions effectively	Y	y	?	n	N
I clearly understand State administrative procedures (especially the FSR and procurement process)	Y	y	?	n	N
I propose a well documented organizational budget and BCP's	Y	y	?	n	N
I utilize resources efficiently while maintaining effective operations	Y	y	?	n	N
I know where to find and how to use outside resources effectively	Y	y	?	n	N

Training Academy

Issue

No State-sponsored development program meets the specific needs of data processing managers. The management skills of these individuals will be an increasingly critical factor in the State's successful implementation of applications of information technology.

Discussion

The need for a uniform, specific development program for data processing managers was identified as a critical issue and a task force was established to develop a questionnaire and conduct in-depth interviews of senior managers in 18 State agencies. Additional data was gathered from other government jurisdictions, the private sector, and academia. Data gathering was designed to determine perceived needs, skill areas on which to focus, and current practices outside State service.

The result of the information-gathering process was the identification of a remarkably consistent pattern:

- The problems facing the State of California with respect to the skills of data processing managers are not unique. All organizations — large and small, public sector and private — face similar problems.
- The primary skill deficiencies are not technical. Almost all respondents indicated that these managers need skill enhancement in areas that can be best categorized as business management skills.
- Individual organizations do not have the resources to develop and maintain their own development programs, and the type of program that is required is not readily available from the private sector or universities.

Based on this input, the work group initiated two parallel efforts. First, a Data Processing Manager Training Resource Guide was drafted containing information on readily available sources of training in specific areas. (Exhibit 4) These resources range from reading material to State-sponsored

classes and outside activities, such as Toastmasters. Second, a proposal was drafted to develop a structured training curriculum directed specifically at data processing management needs. This program envisioned a 15-day management development program spread over a 12-month period.

Throughout its efforts, the work group attempted to minimize the costs of participation in the programs. The results of the work group efforts were submitted to the subcommittee for discussion and the following recommendations were developed for approval by the CFIT Executive Committee.

Subcommittee Recommendations

- *The State Training Center (STC) of DPA and the State EDP Education Program (SEEP) of General Services finalize and publish the Training Resource Guide for use by agencies in identifying available training sources.*
- *STC and SEEP develop and administer a Data Processing Managers' Training Academy with ongoing assistance and cooperation of CFIT. A joint review should be conducted by STC and CFIT after the first year to assess the curriculum and its effectiveness.*
 - *Data processing management development and training efforts should be focused on individuals currently in the Data Processing Manager I and II classifications or equivalent.*
 - *Development costs of the program should be shared on an equitable basis among large data processing user agencies and the ongoing program should be self-supporting from the tuition of participants.*

Status

DPA and SEEP have chosen contractors to provide individual training components and the first academy class is scheduled to begin in January, 1990.

Management Development Assignments

Issue

Specific on-the-job training needs of future data processing managers have received little attention. There is no program to identify, cultivate, and expedite practical training for those individuals who are most qualified to assume the responsibility for management of agency data processing operations and information systems development in the 1990s.

Discussion

Service in State organizations does not generally provide the range of experiences and learning opportunities necessary to fully prepare data processing managers for higher levels of responsibility. In addition, there is no statewide mechanism for identifying potential managers and providing focused on-the-job training opportunities that could efficiently develop well-rounded managers.

A work group representing four State agencies was formed to explore possible means of addressing this issue. The group prepared issue memos covering a number of related items, ranging from the establishment of new classifications to the impact of affirmative action issues and opportunities.

One primary issue addressed by the group was the impact on departments of losing key staff for extended periods through giving them training assignments to other agencies such as OIT or the data centers. The group was concerned that these assignments offer focused, high quality, critically needed experiences.

The group agreed that a pilot series of four-month assignments to test the impact and benefit of the program was advisable. The pilot would provide an opportunity for department managers to experience the benefits of the program and provide a basis for CFIT to garner statewide support for a continuing program. A four-month term would provide sufficient training opportunity for the participants, while not creating an unworkable burden for the participating manager's department. The group decided

that the best location for the pilot would be OIT, because experience with control agency review processes would be extremely valuable to program participants and such experience is available only through OIT.

The group concluded that, in addition to a statewide management development program, each department should be encouraged to initiate its own internal developmental assignments. The key to the success of departmental programs is the commitment of department executive management.

Subcommittee Recommendations

- *CFIT should promote the establishment of training assignments within all State departments and establish at least one four-month pilot management development assignment in OIT and work with OIT in identifying the experiences that will be included in the assignment.*
- *The CFIT Subcommittee on Personnel should define a selection process for management development assignments.*
- *The CFIT Subcommittee on Personnel should develop a mechanism for evaluating the success of management development assignments.*

Status

The Subcommittee on Personnel has appointed a working group to define duties and establish a pilot management development assignment to OIT. The target date for initiating the pilot assignment is March, 1990.

Exhibit 4

Data Processing Manager Training Resource Guide



Data Processing Manager Training Resource Guide

About This Guide

The California Forum on Information Technology, in cooperation with representatives from the State's professional data processing community, has adopted an inventory of the skills and abilities that represent excellence in information systems management. The Data Processing Manager Profile groups these skills and abilities into ten broad categories:

1. Personal Characteristics
2. Creativity, Initiative and Risk Taking
3. Communication, Persuasion and Negotiation
4. Analysis, Problem Solving and Decision Making
5. Effective Team Building
6. Coordination of Work Groups and Organizations
7. Technological Knowledge and Expertise
8. Planning, Organizing, Monitoring and Evaluating Operations
9. Selecting, Developing and Supervising Staff
10. Managing Fiscal and Material Resources

Each of these categories is broken down into specific subordinate abilities and skill sets. For example, under "Creativity, Initiative and Risk Taking," is a specific skill called, "Demonstrates logical and creative thinking." This skills inventory is intended to be a benchmark for analyzing managerial performance and prescribing career development plans for individual managers within a data processing organization.

The *Data Processing Manager Training Resource Guide* is intended as a complement to the appraisal and development process. Courses, books, programs, associations, and experiences which may be useful to data processing professionals and managers in developing competence and expertise have been identified in the guide and keyed to the specific skill to which they are most relevant. This list is certainly not inclusive; it has been developed to provide an awareness of the broad range of resources that are available. It will give you a starting point in developing your own training and development plan or the plans of your subordinate managers and supervisors.

At the end of the guide is a list of the resources that are referenced throughout. In some cases, you will need to contact the resource directly for additional information on course content, cost, and enrollment procedures. Your departmental training office should be able to assist you in this effort. In many cases, your own department may have an internal departmental course or program that addresses your specific training need. Please contact your departmental training office for additional information on the items outlined in this directory, or for information regarding other training resources.

Data Processing Manager Training Resource Guide

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Personal Characteristics						
Strives for excellence		Towards Excellence --- OPM 52KA		Investment in Excellence --- Pacific Institute Masters of Executive Excellence --- Covey <i>In Search of Excellence</i> --- Peters & Waterman <i>A Passion for Excellence</i> --- Peters & Austin		
Demonstrates integrity and ethical behavior				Seven Habits of Highly Effective People --- Covey <i>The Power of Ethical Management</i> --- Blanchard & Peale		
Demonstrates exemplary work habits	Managing Yourself on the Job --- STC 810			Seven Habits of Highly Effective People --- Covey		
Demonstrates energy and enthusiasm				Laughter at Work --- LEX P550 <i>Peak Performers</i> --- Garfield		
Demonstrates self confidence	Stress Management --- STC 335 Managing Yourself on the Job --- STC 810			Assertiveness Training for Managers --- AMA 2527 Projecting a Positive Executive Image --- AMA 2274 Developing a Positive Attitude --- LEX P553 Eliminating Self-Defeating Behavior --- LEX P555 <i>The One Minute Manager</i> --- Blanchard & Johnson		

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Personal Characteristics (continued)						
Demonstrates perseverance					Investment in Excellence — Pacific Institute <i>Leaders</i> — Bennis & Nanus <i>Man's Search for Meaning</i> — Frankl	
Maintains a broad prospective			Interagency Management Institute — STC 201		Masters of Executive Excellence — Covey	
Maintains good health habits		Stress Management — STC 335	Stress Management — OPM 41DI		<i>Pathways</i> — Kemper <i>Stress and Health</i> — Rice	Health Risk Appraisal or Assessment
Creativity, Initiative and Risk Taking						
Demonstrates logical and creative thinking		Problem Solving and Decision Making — STC 330 Creative Problem Solving — OPM 41PC			Problem Solving and Decision Making — Kepner-Tregoe Fast Start in Systems Analysis — Systemation	<i>Conceptual Blockbusting: A Guide to Better Ideas</i> — Adams

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Creativity, Initiative and Risk Taking (continued)						
Fosters innovation, solicits, and accepts new ideas				Tom Peters and Thriving on Chaos — AMA 16210		
Recognizes opportunities to achieve goals and objectives					Peak Performers — Garfield A Whack on the Side of the Head — Voc Oech	
Articulates a vision for the organization					Change Masters — Kanter The Transformational Leader — Tichy & Devanna	
Takes risks and accepts responsibility for their outcome					The Excellence Choice — Belasco The Transformational Leader — Tichy & Devanna	
				Managing Change: Risk Taking — LEX P554		
					A Passion for Excellence — Peters & Austin The Transformational Leader — Tichy & Devanna	

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Communication, Persuasion and Negotiation						
Demonstrates precision, accuracy and clarity in written and oral communications	Written Communication --- STC 621 Effective Presentation Skills --- STC 812 Assigning Staff Work --- STC 423 Editing Workshop --- STC 624			Report Writing --- OPM 45DD Technical Writing --- OPM 45DE Proofreading with Precision --- OPM 45AN Managing Other Peoples' Work --- OPM 45ET	Twelve Steps to Clear Writing --- UCD 4Y07	
				Techniques for Successful Communication --- AMA 2286 How to Sharpen Your Business Writing Skills --- AMA 8515 Ten Steps to More Effective Business Writing --- LEX A032 Voice Power --- LEX C151		Toastmasters
Communicates technical issues in non-technical terms	Written Communication --- STC 621 Effective Presentation Skills --- STC 812					
		Technical Writing --- OPM 45DE		Improving Your Internal Consulting Skills --- AMA 6250		

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Communication, Persuasion and Negotiation (continued)						
Actively listens and understands verbal and nonverbal messages	Effective Listening — STC 813 Interpersonal Communication — STC 816			Listening and Memory Skills Development — OPM 45DK Effective Listening for Improved Communication — UCD 4L33		
				Communicate to Get the Response You Want — AMA 2521 Listen Up! — LEX C172		
Informers superiors of significant issues or problems	Completed Staff Work — STC 623					
				Effective Briefing Techniques — OPM 45DF	<i>How to Manage Your Boss</i> — Hegarty	
Informers staff about significant issues, changes in management focus, or policies	Team Building — STC 310 Effective Meetings — STC 312 Increasing Morale and Productivity — STC 424					
				Conducting Effective Meetings — OPM 45DG		
				Successful Meeting Management — AMA 2205		
				<i>The Change Masters</i> — Kanter		

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Communication, Persuasion and Negotiation (continued)						
Presents issues, policies, and decisions positively	Team Building — STC 310 Leadership and Motivation — STC 315		Team Building and Managing Change — UCD 4L37 Developing Executive Leadership — AMA 2501			
Presents ideas to obtain commitment to a course of action	Team Building — STC 310 Leadership and Motivation — STC 315		Team Building and Managing Change — UCD 4L37 Successfully Managing People — AMA 2295			
Encourages others to express themselves and their ideas	Staff Development — STC 305 Team Building — STC 310 Effective Meetings — STC 312 Leadership and Motivation — STC 315		Conducting Effective Meetings — OPM 45DG Interpersonal Skills Lab — AMA 2575			

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Communication, Persuasion and Negotiation (continued)						
Mediates differences between individuals and groups	Negotiating Skills — STC 264 Team Building — STC 310 Conflict Management — STC 345				Conflict Resolution in the Workplace — UCD 4L39 Negotiating to Win — AMA 2513	
Represents data processing to other work groups within the organization	Data Processing User Liaison — SEEP Negotiating Skills — STC 264 Customer Service Excellence — STC 815			Effective Briefing Techniques — OPM 45DF		
				Front Line Public Contact Skills — UCD 4L43		
					Developing Effective Presentation Skills — AMA 8519 Negotiating to Win — AMA 2513 Customer Services — LEX AO47	
Negotiates with others on behalf of the organization	Data Processing User Liaison — SEEP Negotiating Skills — STC 264 Customer Service Excellence — STC 815			Improving Service to the Public — OPM 45HA		
					Negotiating to Win — AMA 2513	

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Analysis, Problem Solving and Decision Making (continued)						
Anticipates crises and acts to avoid them	Contingency Planning — SEEP Managing Your Computing Resources — SEEP Managing a Programming Project — SEEP Prototype Development — SEEP Leadership and Motivation — STC 315 Conflict Management — STC 345 Managing Multi-Level Priorities — STC 421					
Strives for win-win solutions	Data Processing User Liaison — SEEP Negotiating Skills — STC 264 Conflict Management — STC 345 Handling Difficult People — STC 420				Conflict Resolution in the Workplace — UCD 4L39 Disaster Recovery Planning — AMA 6273	
Follows-up on implementation of decisions to ensure closure	Managing a Programming Project — SEEP Managing Change — STC 425				Communicate to Get the Response You Want — AMA 2521 Negotiating to Win — AMA 2513 Seven Habits of Highly Effective People — Covey	
					Viewing Quality from the Customer's Perspective — AMA 78001 <i>The Excellence Choice</i> — Belasco	

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Effective Team Building						
Promotes cooperation and teamwork throughout the organization	Team Building — STC 310 Increasing Morale and Productivity — STC 424				Developing High Performance Teams — AMA 2523 Group Action — Zenger-Miller	
Encourages openness, including confrontation and honest disagreement	Negotiating Skills — STC 264 Conflict Management — STC 345				Interpersonal Skills Lab — AMA 2575 Negotiating to Win — AMA 2513	
Balances innovation and participation with productivity	Increasing Morale and Productivity — STC 424				Developing High Performance Teams — AMA 2523 <i>The Transformational Leader</i> — Tichy & Devanna	
Forms task forces to blend and utilize specific talents	Managing a Programming Project — SEEP Planning and Managing Projects and Operations — STC 210 Team Building — STC 310				Team Building Skills for Project Managers — AMA 6240 Group Action — Zenger-Miller <i>How to Make Meetings Work</i> — Doyle & Strauss	

Data Processing Manager Training Resource Guide (continued)

Category

Ability or Skill

Effective Team Building (continued)

Functions as a team member with peers, superiors, and staff

Coordination of Work Groups and Organizations

Ensures needed information flows freely among work groups

Develops and supports multi-unit objectives

State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Team Building — STC 310	Effective Interaction Skills — OPM 41DH				
Planning and Managing Projects and Operations — STC 210 Conflict Management — STC 345	Effective Interaction Skills — OPM 41DH				
Communicate to Get the Response You Want — AMA 2521					
Planning and Managing Projects and Operations — STC 210 Managing Multi-Level Priorities — STC 421					
Managing Multiple Priorities — Dun & Bradstreet					

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Coordination of Work Groups and Organizations (continued)						
Promotes positive and productive relationships with other units	Data Processing User Liaison — SEEP Negotiating Skills — STC 264 Customer Service Excellence — STC 815					Managing Your Customer Service Operation — AMA 5268 Improving Your Internal Consulting Skills — AMA 6520 How to Achieve Extraordinary Customer Relations — Kaset
Maintains a customer relations orientation with clients	Data Processing User Liaison — SEEP Customer Service Excellence — STC 815					Quality Control in Service Operation — AMA 4234 Managing Your Customer Service Operation — AMA 5268 Viewing Quality from the Customer's Perspective — AMA 78001 How to Achieve Extraordinary Customer Relations — Kaset <i>Service America! — Albrecht & Zemke</i>
Understands the goals and objectives of clients and user groups	Data Processing User Liaison — SEEP Program Analysis and Evaluation — STC 613 Towards Excellence — OPM 52KA					"client staff meetings, observation sessions"

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Coordination of Work Groups and Organizations (continued)						
Seeks feedback from related organizations and client groups	Data Processing User Liaison — SEEP Program Analysis and Evaluation — STC 613 Customer Service Excellence — STC 815			Improving Your Internal Consulting Skills — AMA 6520		
Balances multiple and conflicting priorities	Data Processing User Liaison — SEEP Managing Your Computing Resources — SEEP Managing Multi-Level Priorities — STC 421			Managing Multiple Priorities — Dun & Bradstreet		
Understands and uses the "informal" organization	Working Within Your Organizational Climate — STC 422					California Forum on Information Technology Government Technology Conference "vendor sponsored user conferences"
Develops relationships with professional and community resources						

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Coordination of Work Groups and Organizations (continued)						
				Vendor Quality Assurance — AMA 4215		"vendor sponsored user conferences" "vendor demonstrations and exhibits" "participation in major procurement activity"
Technological Knowledge and Expertise						
	Maintains knowledge of current system functionality	Managing Your Computing Resources — SEEP				"vendor sponsored user conferences" "vendor sponsored training programs"
Pursues knowledge of technological advances in the industry						
		Artificial Intelligence and Expert Systems — SEEP Microcomputer Security — SEEP Telecommunications Security — SEEP		Long Range Information Systems Planning — AMA 6575 Building the Architecture Plan for Info Systems — AMA 6580 James Martin Seminars		

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Technological Knowledge and Expertise (continued)						
Seeks advice and assistance on technical issues						Office of Information Technology "vendor demonstrations and exhibits" "vendor service representatives" "professional data processing associations"
Maintains knowledge of related developments in client programs						"client planning meetings" "client staff meetings" "departmental newsletter" "client sponsored training programs"
Commits to an ongoing plan of professional development				Managing Effectiveness Assessment — O'Mara and Associates Managing Personal Growth — Blessing/White		"annual Individual Development Plan"
Promotes the concept of "life-long learning" among staff	Staff Development — STC 305			Career Development in Organizations — AMA 8259		

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Planning, Organizing, Monitoring and Evaluating Operations						
Develops goals consistent with departmental mission		Results Oriented Management — OPM 41RL		MBO Blueprint Program — Abney & Associates		Departmental Mission Statement
Develops action plans to implement objectives	Contingency Planning — SEEP Managing a Programming Project — SEEP Planning and Managing Projects and Operations — STC 210	Results Oriented Management — OPM 41RL				
				Planning Techniques for Effective Management — AMA 2515 Getting Your Plan Off the Shelf and Into Action — AMA 2555 Senior Project Management — AMA 6504 Project Management — Kepner-Tregoe		
Defines organizational roles and responsibilities		Results Oriented Management — OPM 41RL		Long Range Information Systems Planning — AMA 6575 Building the Architecture Plan for Info Systems — AMA 6580 MBO Blueprint Program — Abney & Associates		

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Planning, Organizing, Monitoring and Evaluating Operations (continued)						
Determines the resources required for organizational operations	Data Processing Estimating and Time Management — SEEP Managing Your Computing Resources — SEEP Planning and Managing Projects and Operations — STC 210 Budget Building Workshop — STC 642					Basic Project Management — AMA 6503 Senior Project Management — AMA 6504 Info Systems Project Management — AMA 6515 Technical Project Management — AMA 4251 Project Management — Kepner-Tregoe
Establishes policies, systems, and procedures	Managing a Programming Project — SEEP Microcomputer Security — SEEP Prototype Development — SEEP Telecommunications Security — SEEP Procedure and Manual Writing — STC 629					Info Systems Project Planning and Modeling — AMA 6516 User Documentation: How to Write User Manuals — AMA 6546 Developing Procedures and Policies — Information Mapping
Initiates changes to improve policies, systems, and procedures	Contingency Planning — SEEP Change Management — STC 425					Statistical Process Control — AMA 4286 Developing Procedures and Policies — Information Mapping <i>The Change Masters</i> — Kanter

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Planning, Organizing, Monitoring and Evaluating Operations (continued)						
Assures compliance with administrative and legal requirements						
	Microcomputer Security — SEEP Telecommunications Security — SEEP Affirmative Action/Equal Employment Opportunity — STC 220 Administering the State Disciplinary Process — STC 240 Labor Relations and Grievance Handling — STC 250 Managing Services Contracts — STC 671 FSR Preparation Course — Office of Information Technology, DOF Procurement Course — Department of General Services					
				Legal Issues in Information Technology — AMA 6252		
Monitors and compares program activities to established plan						
	Managing a Programming Project — SEEP Data Processing Estimating and Time Management — SEEP Planning and Managing Projects and Operations — STC 210 Program Planning and Evaluation — OPM 41RN					
				Statistical Process Control — AMA 4286 MBO Blueprint Program — Abney & Associates		
Monitor and adjusts existing policies, procedures and systems						
	Managing Your Computing Resources — SEEP Data Processing Estimating and Time Management — SEEP Procedure and Manual Writing — STC 629 Quality Improvement Techniques — SCC					
				Statistical Process Control — AMA 4286 User Documentation: How to Write User Manuals — AMA 6546		

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Planning, Organizing, Monitoring and Evaluating Operations (continued)						
Evaluates and compares results to objectives	Managing a Programming Project — SEEP Program Analysis and Evaluation — STC 613					
	Program Planning and Evaluation — OPM 41RN					
				Basic Project Management — AMA 6503		
Evaluates and compares results to objectives	Data Processing User Liaison — SEEP Performance Appraisal — STC 230 Team Building — STC 310					
				Senior Project Management — AMA 6504 Team Building Skills for Managers — AMA 6240 <i>Peak Performers</i> — Garfield <i>The One Minute Manager</i> — Blanchard & Johnson		
Selecting, Developing and Supervising Staff						
Recruits and assigns staff to meet organizational needs	Interviewing Techniques — STC 350					
			Managing Technical & Professional Employees — UCD 4L38			
			Recruiting, Interviewing and Selecting Employees — AMA 8266			

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Selecting, Developing and Supervising Staff (continued)						
Motivates staff to perform well, giving praise and recognition	Performance Appraisal — STC 230 Leadership and Motivation — STC 315 Increasing Morale and Productivity — STC 424	Managing Technical and Professional Employees — UCD 4138		Developing High Performance Teams — AMA 2523 Improving Your Coaching and Counseling Skills — AMA 8246 Managing Excellence — Richard-Rogers The Seven Habits of Highly Effective People — Covey <i>The One Minute Manager</i> — Blanchard & Johnson		
Establishes performance standards with staff	Performance Appraisal — STC 230			Managing Technical and Professional Employees — UCD 4138 Performance Appraisal — AMA 8288 Supervision — Zenger-Müller		
Assigns and adjusts staff workloads	Planning and Managing Projects and Operations — STC 210 Assigning Staff Work — STC 423					
Delegates authority and responsibility appropriately	Leadership and Motivation — STC 315			Planning Techniques for Effective Management — AMA 2515 <i>Managing Management Time</i> — Oncken		

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Selecting, Developing and Supervising Staff (continued)						
Selects and assigns staff consistent with affirmative action goals	Affirmative Action/Equal Employment Opportunity — STC 220 Interviewing Techniques — STC 350					
Develops staff through assignments, training, and coaching	Staff Development — STC 305 On the Job Training — STC 415				Developing High Performance Teams — AMA 2523 Improving Your Coaching and Counseling Skills — AMA 8246 Career Development in Organizations — AMA 8259 Managing Excellence — Richard-Rogers <i>Peak Performers</i> — Garfield	
Identifies staff strengths and weaknesses	Performance Appraisal — STC 230 Staff Development — STC 305 Managing Technical and Professional Employees — UCD 4138 Performance Appraisal — AMA 8288					

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Selecting, Developing and Supervising Staff (continued)						
Interprets and administers labor contracts	Labor Relations and Grievance Handling — STC 250					
Uses preventive, corrective, and adverse actions as necessary	Administering the State Disciplinary Process — STC 240					
Managing Fiscal and Material Resources						
Understands state administrative procedures						<i>State Administrative Manual</i>
Proposes a well-documented organizational budget	Budget Building Workshop — STC 642					Basic Budgeting for Non-Financial Managers — AMA 1259
Develops realistic and efficient project budgets	Data Processing Estimating and Time Management — SEEP					Senior Project Management — AMA 6504 Project Management — Kepner-Tregoe

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Selecting, Developing and Supervising Staff (continued)						
Monitors and records critical work behaviors	Performance Appraisal — STC 230			Performance Appraisal — AMA 8288 Supervision — Zenger-Miller		
Appraises and discusses individual performance	Performance Appraisal — STC 230			Performance Appraisal — AMA 8288 Improving Your Coaching and Counseling Skills — AMA 8246 Supervision — Zenger-Miller <i>The One Minute Manager</i> — Blanchard & Johnson		
Adjusts approach to fit the individual or group's situation	Interpersonal Communication — STC 816			Interpersonal Skills Lab — AMA 2575 Developing High Performance Teams — AMA 2523 Frontline Leadership — Zenger-Miller <i>Peak Performers</i> — Garfield		
Responds to staff grievances promptly and fairly	Labor Relations and Grievance Handling — STC 250					<i>Memoranda of Understanding for All Applicable Units</i>

Data Processing Manager Training Resource Guide (continued)

Category Ability or Skill	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Managing Fiscal and Material Resources (continued)						
Promotes an entrepreneurial approach to resource management						Thinking and Managing Strategically — AMA 2530 Tom Peters and Thriving on Chaos — AMA 16210
Considers expenditures as venture capital, not cost of business						Thinking and Managing Strategically — AMA 2530 Long-Range Information Systems Planning — AMA 6575

Data Processing Manager Training Resource Guide (continued)

Category	State Programs	Other Government	Colleges & Universities	Private	Self Study	Other Sources
Ability or Skill						
Managing Fiscal and Material Resources (continued)						
Utilizes resources for effective and efficient operations	Managing Your Computing Resources — SEEP Planning and Managing Projects and Operations — STC 210 Cost Benefit Analysis — STC 645					Streamlining Your Organization — AMA 78213 Info Systems Project Planning and Modeling — AMA 6516 Inform Systems Project Management — AMA 6515
Operates within allocated resources	Contingency Planning — SEEP Data Processing Estimating and Time Management — SEEP					Basic Project Management — AMA 6503
Monitors and adjusts the use of resources	Managing Your Computing Resources — SEEP Planning and Managing Projects and Operations — STC 210					Streamlining Your Organization — AMA 78213 Basic Project Management — AMA 6503
Knows and uses outside resources when appropriate	Managing Services Contracts — STC 671					

Data Processing Manager Training Resource Guide

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Books

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- Analyzing Performance Problems*, Robert F. Mager and Peter Pipe (Fearon, 1970).
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- Conceptual Blockbusting: A Guide to Better Ideas*, James L. Adams (Norton and Company, 1980).
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- How to Manage Your Boss*, Christopher J. Hegarty (Ballantine Books, 1985).
- In Search of Excellence*, Tom Peters and Robert H. Waterman (Harper and Row, 1982).
- Leaders: The Strategies for Taking Charge*, Warren Bennis and Burt Nanus (Harper and Row, 1985).
- Managing Management Time*, William Oncken, Jr. (Prentice-Hall, 1984).
- Man's Search for Meaning*, Viktor Frankl
- The One Minute Manager*, Kenneth Blanchard and Spencer Johnson (William Morrow, 1982).
- A Passion for Excellence*, Tom Peters and Nancy Austin (Random House, 1985).
- Pathways: A Success Guide for a Healthy Life*, Donald W. Kemper, Jim Giuffre, and Gene Drabinski (Healthwise, 1985).
- Peak Performers*, Charles Garfield (William Morrow, 1986).
- The Power of Ethical Management*, Kenneth Blanchard and Norman Vincent Peale (William Morrow, 1988).
- Service America*, Karl Albrecht and Ron Zemke (Dow Jones-Irwin, 1985).
- Stress and Health: Principles and Practices for Coping and Wellness*, Phillip L. Rice (Brooks/Cole, 1987).
- The Transformational Leader*, Noel M. Tichy and Mary Anne Devanna (John Wiley and Sons, 1986).
- A Whack on the Side of the Head: How to Unlock Your Mind to Innovation*, Roger Von Oech (Warner Books, 1983).

Data Processing Manager Training Resource Guide Bibliography and Reference List (continued)

State Training Providers

State EDP Education Program
(SEEP)
1500 5th Street, Room 116
Sacramento, CA 95814
(916) 322-3755, ATSS 492

State Training Center (STC)
1515 S Street, North Building,
Suite 105
Sacramento, CA 94240-2350
(915) 445-5121, ATSS 485

Other Government Training Providers

U.S. Office of Personnel
Management (OPM)
San Francisco Regional Training
Center
120 Howard Street
San Francisco, CA 94105
(415) 974-7700

Colleges and Universities Providing Training

The Los Rios Institute for Business,
Government and Industry
1787 Tribute Road, Suite B
Sacramento, CA 95815
(916) 646-9784

University of California, Davis
University Extension (UCD)
1333 Research Park Drive
Davis, CA 95616

Sacramento City College (SCC)
3835 Freeport Boulevard
Sacramento, CA 95822
(916) 449-7111

Private Training Providers

Abney and Associates
720 South B Street, Suite 3
San Mateo, CA 94401
(415) 348-2940

Blessing/White
900 State Road
Princeton, NJ 08540
1-800-222-1349

American Management Association
135 West 50th Street
New York, NY 10020
(518) 891-4048

Covey and Associates
226 West 2230 North, Suite 201
Provo, UT 84604
1-800-331-7716

Data Processing Manager Training Resource Guide Bibliography and Reference List (continued)

Private Training Providers (continued)

Dun and Bradstreet
Business Education Services
PO Box 3734
Church Street Station
New York, NY 10008-3734
(212) 312-6880

Information Mapping
275 Wyman Street
Waltham, MA 02154
(617) 890-7003

Kaset, Inc.
4014 Gunn Highway, Suite 162
Tampa, FL 33624
1-800-237-2361

Kepner-Tregoe
PO Box 704
Princeton, NJ 08542
(609) 921-2806

Learning Exchange (LEX)
650 Howe Avenue, Suite 600
Sacramento, CA 95825
(916) 929-9200

James Martin Seminars
Technology Transfer Institute, Inc.
741 Tenth Street
Santa Monica, CA 90402
(213) 394-8305

O'Mara and Associates
5979 Greenridge Road
Castro Valley, CA 94522
(415) 582-7744

Pacific Institute
1201 Western Avenue
Seattle, WA 98101
(206) 628-4800

Richard Rogers Group
2030 South East 100th Avenue
Portland, OR 97216
1-800-233-3302

Systemation
2452 South Trenton Way, Suite L
Denver, CO 80231

Zenger-Miller
10201 Torre Avenue
Cupertino, CA 95014
(408) 257-7430



The Statement on Ethics

Issue

Ethics are important in the practice of information management. Values and moral principles associated with standards of professional behavior should be documented and shared with data processing managers throughout State government.

Discussion

Data processing managers must be continually aware of the need to avoid compromising activities, especially in dealing with vendors. Values of confidentiality and impartiality must be stressed, as well as the avoidance of activities that would compromise objective evaluation of vendor offerings.

Managers have an obligation to demonstrate the highest integrity in order to maintain and improve the image of their profession. They must avoid the appearance of illegal or self-serving acts. Expansion of automation for any reason other than the accomplishment of legitimate program goals must be considered inappropriate and unethical.

Managers have an obligation to treat members of their staff with respect and help them realize their full potential. They have an obligation to identify and reward good performance and deal honestly with their peers when providing references.

After discussion, the subcommittee developed a draft "Code of Ethics" covering a broad range of issues. (Exhibit 5) This draft is recommended for adoption by the CFIT Executive Committee. This recommendation should not be viewed as a response to existing problems; instead, it is intended as a declaration of the State's intent to continue to maintain the highest level of ethics within its information technology organizations.

Subcommittee Recommendation

Adopt the Code of Ethics as a statement of conduct for the State's information technology community.

- *Distribute the Code to current data processing managers.*
- *Ask the State Personnel Board to distribute copies of the Code to all new Data Processing Managers.*
- *Ask the State EDP Education Program and the Department of Personnel Administration to include the Code in training programs for data processing managers.*

Status

The Code of Ethics has been widely distributed throughout the state information management community. Provision has been made for providing copies of the Code to newly appointed managers.

Exhibit 5

Data Processing Manager Code of Ethics



STATE OF CALIFORNIA
DATA PROCESSING MANAGER
CODE OF ETHICS



INTRODUCTION: Recognizing that ethics are an important consideration in the practice of data processing and that the moral principles followed by Data Processing Managers should be formalized, the California Forum on Information Technology do hereby adopt the following resolution:

WHEREAS the members of the California Forum on Information Technology, represent the profession of Data Processing Managers in California State Government. and

WHEREAS State Government relies on the data processing profession to assist in the fulfillment of its mission, and

WHEREAS Data Processing Managers must maintain high standards of conduct, honor and character in order to carry on proper and meaningful Data Processing practices,

THEREFORE BE IT RESOLVED, that a Code of Ethics be now set forth, outlining the standards of professional behavior for the guidance of each Data Processing Manager in California State Government.

In accordance with this resolution, the California Forum on Information Technology, approves and adopts the principles set forth for each data processing manager in California State Government.

INTERPRETATION OF PRINCIPLES: The provisions of this Code of Ethics cover basic principles in the various aspects of Data Processing Management. I shall realize that individual judgment is required in the application of these principles. I have the responsibility to conduct myself so that my good faith and integrity should not be open to question. While having due regard for the limit of my technical skills, I will promote the highest possible data processing standards to the end of advancing the interests of the Department for which I work and for the State of California.

ARTICLES:

- I. I shall continually strive for improvement in the proficiency and effectiveness of California State Government.
- II. I have the obligation to exercise honesty, objectivity, and diligence in the performance of my duties and responsibilities.
- III. I have a responsibility to know and understand the mission of my Department as well as I know and understand technology.
- IV. I shall be prudent in the use of information acquired in the course of my duties. I shall not use confidential information for any personal gain nor in a manner which would be detrimental to the welfare of my Department or its clients.
- V. I will at all times be honest with my employees and will not place marginal or poor performing employees on employment lists, falsely raising hopes of employees.
- VI. I will give honest and full disclosure appraisals when asked for references, and will not lead other Departments to hire poor performing or problem employees based upon faulty or incomplete references.
- VII. I will actively strive to improve the performance of all employees working for me.
- VIII. I will encourage outstanding employees to broaden their skills and knowledge including those of the California State Government, even if it means losing those employees to another State Department.
- IX. I shall conduct myself with the highest degree of integrity when dealing with the vendor community, and shall avoid any activities or conduct which would constitute a conflict of interest in matters pertaining to procurement of equipment or services.



Promotional Testing

Issue

Decentralized testing may not provide agencies with the best qualified candidates from which to select their senior data processing managers.

Discussion

The State Personnel Board has indicated that it no longer has the resources to conduct servicewide promotional examinations. In the absence of service-wide competition for high level data processing management positions, it is likely that the State will begin to see increasing inconsistencies in the standards of managerial performance from one agency to another. These inconsistencies in turn will result in a diminishing reserve of well-qualified data processing management candidates.

A centralized testing process would provide the opportunity to view data processing management talent on a statewide basis, thus offering agencies a broader candidate pool from which to fill critical positions. The most qualified candidates would be available to all agencies for consideration. By providing each agency with a broader selection of candidates, the likelihood of finding the best qualified person for a given job would be increased. Service-wide pools would also provide for increased promotional opportunities for candidates.

After discussion and careful consideration, the subcommittee approved the following recommendation to the CFIT Executive Committee.

Subcommittee Recommendation

The Department of Finance should request from SPB exclusive authority for administering servicewide testing for Data Processing Manager III and IV classifications effective Octo-

ber 1, 1989. A standing CFIT Subcommittee for Personnel will advise on the process and assist in arranging for panel members.

- *The Personnel Office of Finance will have primary responsibility for examination processing, including examination notice preparation and distribution, receipt of applications, and scheduling of examinations. Consultants from participating agencies will provide application review, development of examination questions, and panel members to serve in the examination.*
- *The CFIT Subcommittee for Personnel will propose a revised examination plan for these classifications. The plan will provide for consistent evaluation and consideration of candidates success in completing the Data Processing Managers' Training Academy program, the Management Development Program, or another formal development program.*

Status

The Department of Finance has declined to accept responsibility for servicewide testing on the grounds that such responsibility is not consistent with its role as the State's budget agency. The CFIT Subcommittee on Personnel is investigating alternative mechanisms for administering servicewide testing for the Data Processing Manager III and IV classifications.

DATA PROCESSING MANAGERS TRAINING ACADEMY

Welcome to the first Training Academy for Data Processing Managers in California State Service. As you know, there are seven courses which make up the academy and each course offers specific objectives and expectations. Noted below are the objectives for the overall program. At various times throughout the year, we will refer back to these two points to remind us all as to our intent and direction. As the academy progresses, it very well may occur that we will revise and/or replace or add on to this list.

TRAINING ACADEMY OBJECTIVES

1. TO ENHANCE THE "BUSINESS" AND MANAGEMENT SKILLS OF STATE DATA PROCESSING MANAGERS, THEREFORE, PREPARING THEM FOR FUTURE EXECUTIVE ROLES IN STATE GOVERNMENT.
2. TO PROVIDE VISIBILITY AND NETWORKING OPPORTUNITIES TO THE MEMBERS OF THE DATA PROCESSING MANAGERS ACADEMY (SOFT LEARNING).